

## Supplementary Material

### Supplementary Tables

#### Supplemental Table S1. Search strings by databases

Database	Search string
PubMed/Medline	("dietary inflammatory index"[Title/Abstract] OR "dietary inflammatory score"[Title/Abstract] OR "dietary inflammation potential"[Title/Abstract] OR "anti inflammatory diet"[Title/Abstract] OR "DII"[Title/Abstract] OR (((("potential"[All Fields] OR "potential s"[All Fields] OR "potentialities"[All Fields] OR "potentiality"[All Fields] OR "potentially"[All Fields] OR "potentials"[All Fields] OR "potentiate"[All Fields] OR "potentiated"[All Fields] OR "potentiates"[All Fields] OR "potentiating"[All Fields] OR "potentiation"[All Fields] OR "potentiations"[All Fields] OR "potentiative"[All Fields] OR "potentiator"[All Fields] OR "potentiators"[All Fields]) AND ("inflammatories"[All Fields] OR "inflammatory"[All Fields])) AND "intake"[Title/Abstract]) OR "inflammatory diet"[Title/Abstract] OR "pro inflammatory diet"[Title/Abstract] OR "inflammatory potential of diet"[Title/Abstract]) AND ("sleep"[MeSH Terms] OR "long sleep duration"[Title/Abstract] OR "sleep duration"[Title/Abstract] OR "night time sleep duration"[Title/Abstract] OR "short sleep"[Title/Abstract] OR "short sleep duration"[Title/Abstract] OR "sleep quality"[Title/Abstract] OR "insomnia"[Title/Abstract] OR "sleep disorders"[Title/Abstract] OR "short term sleep restriction"[Title/Abstract] OR "drowsiness"[Title/Abstract] OR "hypersomnia"[Title/Abstract] OR "sleep disturbance"[Title/Abstract] OR "daytime sleepiness"[Title/Abstract] OR "sleep time"[Title/Abstract] OR "sleep"[Title/Abstract] OR "short sleepers"[Title/Abstract] OR "sleep deprivation"[Title/Abstract] OR "long sleepers"[Title/Abstract] OR "sleep disorders"[Title/Abstract] OR "sleep time"[Title/Abstract] OR "nap"[Title/Abstract])
Web of Science	TS=("dietary inflammatory index" OR "dietary inflammatory score" OR "dietary inflammation potential" OR "anti-inflammatory diet" OR "DII" OR "potential inflammatory intake" OR "inflammatory diet" OR "pro-inflammatory diet" OR "inflammatory potential of diet") AND TS=("long sleep duration" OR "sleep duration" OR "night time sleep duration" OR "short sleep" OR "short sleep duration" OR "sleep quality" OR insomnia OR "sleep disorders" OR "Short-term sleep restriction" OR drowsiness OR hypersomnia OR "sleep disturbance" OR "daytime sleepiness" OR "sleep time" OR sleep OR "short sleepers" OR "sleep deprivation" OR "long sleepers" OR "sleep disorders" OR "sleep time" OR nap)
Scopus	TITLE-ABS-KEY("dietary inflammatory index") OR TITLE-ABS-KEY("dietary inflammatory score") OR TITLE-ABS-KEY("dietary inflammation potential") OR TITLE-ABS-KEY("anti-inflammatory diet") OR TITLE-ABS-KEY(DII) OR TITLE-ABS-KEY("potential inflammatory intake") OR TITLE-ABS-KEY("inflammatory diet") OR TITLE-ABS-KEY("pro-inflammatory diet") OR TITLE-ABS-KEY("inflammatory potential of diet") AND TITLE-ABS-KEY("long sleep duration") OR TITLE-ABS-KEY("sleep duration") OR TITLE-ABS-KEY("night time sleep duration") OR TITLE-ABS-KEY("short sleep") OR TITLE-ABS-KEY("short sleep duration") OR TITLE-ABS-

KEY("sleep quality") OR TITLE-ABS-KEY(insomnia) OR TITLE-ABS-KEY("sleep disorders") OR TITLE-ABS-KEY("Short-term sleep restriction") OR TITLE-ABS-KEY(drowsiness) OR TITLE-ABS-KEY(hypersomnia) OR TITLE-ABS-KEY("sleep disturbance") OR TITLE-ABS-KEY("daytime sleepiness") OR TITLE-ABS-KEY("sleep time") OR TITLE-ABS-KEY(sleep) OR TITLE-ABS-KEY("short sleepers") OR TITLE-ABS-KEY("sleep deprivation") OR TITLE-ABS-KEY("long sleepers") OR TITLE-ABS-KEY("sleep disorders") OR TITLE-ABS-KEY("sleep time") OR TITLE-ABS-KEY(nap)
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**Supplemental Table S2.** The adapted version of the Newcastle–Ottawa Scale (NOS) Checklist for Cross-Sectional/Longitudinal studies

Author, publication year	Study design	Selection				Comparability	Outcome		Score	Interpretation
		Representativeness of the sample	Sample size	Nonrespondents	Ascertainment of exposure		Based on design and analysis	Assessment of outcome		
DuBois et al., 2024 <sup>40</sup>	Cross-sectional	+	+		++	++	+	+	8	Low risk of bias
Farrell et al., 2023 <sup>36</sup>	Longitudinal	+	+		++	++	++	+	9	Low risk of bias
Wang et al., 2022 <sup>31</sup>	Cross-sectional	+	+		++	++	+	+	8	Low risk of bias
Behbahani et al., 2022 <sup>32</sup>	Cross-sectional	+	+		++	++	+	+	8	Low risk of bias
Wirth et al., 2022 <sup>33</sup>	Cross-sectional	+	+		++	++	++	+	9	Low risk of bias

Masaad et al., 2021 <sup>37</sup>	Cross-sectional	+	+		++	+	+	+	7	Low risk of bias
Kase et al., 2021 <sup>34</sup>	Cross-sectional	+	+	+	+	++	+	+	8	Low risk of bias
Tabrizi et al., 2021 <sup>26</sup>	Cross-sectional	+	+		++	+	+	+	7	Low risk of bias
Bazyar et al., 2021 <sup>27</sup>	Cross-sectional	+	+	+	++	++	+	+	9	Low risk of bias
Godos et al., 2019 <sup>28</sup>	Cross-sectional	+	+		++	++	+	+	8	Low risk of bias
Lopes et al., 2019 <sup>29</sup>	Cross-sectional		+		++	+	++	+	7	Low risk of bias

**Supplemental Table S3.** The adapted version of the Newcastle–Ottawa Scale (NOS) Checklist for Case-Control studies

Author, publication year	Study design	Selection				Comparability	Outcome			Score	Interpretation
		The definition of cases is adequate	Representativeness of the cases	Selection of controls	Definition of controls	Based on design and analysis	Ascertainment of exposure	Same method of ascertainment for cases and controls	Non-response rate		

Correa-Rodríguez et al., 2020 <sup>39</sup>	Case-Control	+	+	+	+	++		+		7	Low risk of bias
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**Supplemental Table S4.** The Jadad Checklist for Randomized Controlled Trials

Author, publication year	Study design	Was the study described as randomized (this includes words such as randomly, random, and randomization)?	Was the method used to generate the sequence of randomization described and appropriate (table of random numbers, computer-generated, etc)?	Was the study described as double blind?	Was the method of double blinding described and appropriate (identical placebo, active placebo, dummy, etc)?	Was there a description of withdrawals and dropouts?	Score	Interpretation
Wirth et al., 2022 <sup>38</sup>	RCT	1	0	0	0	1	2	inferior quality
Wirth et al., 2020 <sup>35</sup>	Self-selection trial	0	0	0	0	0	0	inferior quality